IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number:	10/733,995
Filing Date:	12/11/2003
Applicant(s):	Reza Ghasemi and Walter Haenel
Entitled:	QUALITY EVALUATION TOOL
	FOR DYNAMIC PORTALS
Examiner:	Douglas Godbold
Group Art Unit:	2626
Attorney Docket No.:	BOC920030102US1 (1082-005U)

TRANSMITTAL OF APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

     Submitted herewith is Appellant's Appeal Brief in support of the Notice of Appeal filed

June 25, 2008. As this Appeal Brief has been timely filed within the shortened statutory period

of two months from the date of the Notice of Appeal, no extension of time under 37 C.F.R. §

1.136 is required. Notwithstanding, please charge any shortage in fees due under 37 C.F.R. §§

1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to

Deposit Account 50-3829, and please credit any excess fees to such deposit account.

Date: August 24, 2008   Respectfully submitted,

                               /Steven M. Greenberg/
                               Steven M. Greenberg, Registration No. 44,725
                               Customer Number 46322

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APPEAL BRIEF

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Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed June 25, 2008, wherein Appellant appeals from the Examiner's rejection of claims 1 through 16.

I. REAL PARTY IN INTEREST

This application is assigned to International Business Machines Corporation by assignment recorded on December 11, 2003, at Reel 014803, Frame 0401.

II. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1 through 16 are pending in this Application and have been three times rejected. It is from the multiple rejections of claims 1 through 16 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

Claim 7 was amended in the Amendment filed on August 6, 2007 (the "First Amendment") in response to the Non-Final Office Action dated May 14, 2007 (the "First Non-Final Office Action"). Claims 8 through 12 and 16 subsequently were amended in the Amendment filed on February 5, 2008 (the "Second Amendment") in response to the Non-Final Office Action dated October 10, 2007 (the "Second Non-Final Office Action").

V. SUMMARY OF CLAIMED SUBJECT MATTER

By reference to paragraph [0019] of Appellants' published specification, Appellants have invented a method and system for evaluating the quality of voice input recognition by a voice portal. In Appellants' invention, a set of grammars can be collected for one or more voice applications disposed in a voice portal. Subsequently, the ability of the voice portal to recognize a particular grammar from among the set of other grammars that may be active with the particular grammar being tested can be recognized. Thereafter, a measure of quality of recognition can be derived for each grammar, thereby enabling the voice portal to be reconfigured to allow for better voice input recognition.

With specific reference to claim 1, claim 1 as originally filed recites a method of evaluating the quality of voice input recognition by a voice portal. The method includes extracting a current grammar from the voice portal. (Par. [0024]) Thereafter, a test input can be generated for the current grammar. (Par. [0026]) In this regard, the test input includes a test pattern and a set of active grammars for the current grammar. (Par. [0027]) Subsequently, the test input is provided to the voice portal and the test pattern is analyzed with respect to the set of active grammars with a speech recognition engine in the voice portal. (Par. [0028]) Finally, a measure of quality of recognition can be derived for the current grammar. (Par. [0029])

With specific reference to claim 7, a computer program product for evaluating the quality of voice input recognition by a voice portal is recited. The computer program includes a computer usable program code including a routine set of instructions which when executed by a machine cause the machine to extract a current grammar from the voice portal. (Par. [0024]) Thereafter, a test input is generated for the current grammar. (Par. [0026]) In this regard, the test input includes a test pattern and a set of active grammars for the current grammar. (Par. [0027]) Subsequently, the test input is provided to the voice portal and the test pattern is analyzed with respect to the set of active grammars with a speech recognition engine in the voice portal. (Par. [0028]) Finally, a measure of quality of recognition can be derived for the current grammar. (Par. [0029])

With specific reference to claim 13, a system for evaluating the quality of voice input recognition by a voice portal having a speech recognition engine is recited. The system includes

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an analysis interface for extracting a set of current grammars from the voice portal and a test pattern generator for generating a test input for each current grammar. (Par. [0022]) The test input includes a test pattern and a set of active grammars corresponding to each current grammar. (Par. [0027]) The system also includes a text-to-speech engine for entering each test pattern into the voice portal. (Par. [0020]) Yet further, the system includes a results collector for analyzing each test pattern entered into the voice portal with the speech recognition engine against the set of active grammars corresponding to the current grammar for said test pattern. (Par. [0024]) Finally, the system includes a results analyzer for deriving a set of statistics of a quality of recognition of each current grammar. (Pars. [0020] and [0028])

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 7 through 12 have been rejected under 35 U.S.C. § 101.

Claims 1, 3, 4, 7, 9 and 10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,117,153 to Mahajan et al. (Mahajan) in view of U.S. Patent No. 7,139,706 to Yuschik.

Claims 2 and 8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mahajan in view of Yuschik and further in view of U.S. Patent Application Publication No. 2002/0173955 by Reich.

Claims 5, 6, 11, 12, 13, 15 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mahajan in view of Yuschik and further in view of U.S. Patent No. 6,725,797 to Randic.

Claim 14 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mahajan in view of Yuschik and Randic and further in view of Reich.

VII. THE ARGUMENT

THE REJECTION OF CLAIMS 7 THROUGH 12 UNDER 35 U.S.C. § 101

On page 3 of the Final Office Action dated March 18, 2008 (the "Final Office Action"),

the Examiner asserted that the claimed invention, as recited in claims 7 through 12 are directed

to non-statutory subject matter. In the Second Amendment, Appellants responded in reference to

State Street Bank and Trust Company v. Signature Financial Group, Inc.[1], in which the court set

forth the criteria for establishing statutory subject matter under 35 U.S.C. § 101 as follows:

> The question of whether a claim encompasses statutory subject matter should not focus on which
> of the four categories of subject matter a claim is directed to —process, machine, manufacture, or
> composition of matter—but rather on the essential characteristics of the subject matter, in
> particular, its practical utility. Section 101 specifies that statutory subject matter must also satisfy
> the other "conditions and requirements" of Title 35, including novelty, nonobviousness, and
> adequacy of disclosure and notice. *See In re Warmerdam*, 33 F.3d 1354, 1359, 31 USPQ2d 1754,
> 1757-58 (Fed. Cir. 1994). For purpose of our analysis, as noted above, claim 1 is directed to a
> machine programmed with the Hub and Spoke software and admittedly produces a "useful,
> concrete, and tangible result." Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557. This renders it
> statutory subject matter, even if the useful result is expressed in numbers, such as price, profit,
> percentage, cost, or loss.

Thus, as articulated above, the test for determining whether subject matter is patentable under 35

U.S.C. § 101 involves deciding if the subject matter produces a "useful, concrete, and tangible

result."

Appellants further referred to M.P.E.P. 2107.02 in which a discussion of the procedural

considerations regarding a rejection based upon lack of utility (i.e., 35 U.S.C. § 101) is found.

Specifically, M.P.E.P. § 2107.02(I) states that:

> regardless of the category of invention that is claimed (e.g., product or process), an applicant need
> only make one credible assertion of specific utility for the claimed invention to satisfy 35 U.S.C.
> 101 and 35 U.S.C. 112

Consequently, Appellants referred Examiner to paragraph [0029] of Appellants' published Patent

Application, in which it is stated that in the invention as claimed,

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[1] 149 F.3d 1368, 47 USPQ2d 1596 (Fed Cir. 1998)

[0029] Once the test pattern is entered into the voice server 110, in step 240, a speech recognition engine in the voice server can be used to obtain an assessment of how well the voice portal recognized the test pattern. The quality of the recognition of the test and the current grammar being tested by the test input is therefore obtained. This quality of recognition can be monitored and collected by the results collector servlet 130 and stored in the measurements results database 150. The quality of recognition can include a set of statistics that are generally used to assess the quality.

Accordingly, Appellants argued that Appellants had asserted a credible utility. Even still, in further support, Appellants referred Examiner to M.P.E.P. § 2107.02(III)(A) which provided a discussion of the holding of the Court of Customs and Patent Appeals in *In re Langer* in which it is stated:

As a matter of Patent Office practice, **a specification which contains a disclosure of utility which corresponds in scope to the subject matter sought to be patented must be taken as sufficient to satisfy the utility requirement of § 101** for the entire claimed subject matter unless there is a reason for one skilled in the art to question the objective truth of the statement of utility or its scope. (emphasis in original)

As such, Appellants concluded,

Since a credible utility is contained in Applicants' specification and expressed clearly and expressly in claims 7 through 12 as "A computer program product for evaluating the quality of voice input recognition by a voice portal", the utility requirement of 35 U.S.C. § 101 (i.e., whether the invention produces a useful, concrete, and tangible result) has been met.

In response, in the Final Office Action Examiner argued,

With regards to applicant's arguments, see remarks page 9, that the subject matter of claims 7-12 provides a useful, concrete and tangible result, the examiner respectfully disagrees. The computer program product of claims 7-12 is directed at mere computer code. Computer code on its own cannot possibly result in a useful, concrete and tangible result as it is a mere set of instructions readable only to a computer. A computer system executing the code is necessary to produce useful, concrete and tangible results. Therefore claims 7-12 produce no useful, concrete and tangible result.

Examiner's arguments, however, are misguided and fly in the face of the law as set forth in the seminal case, In re Beauregard.

In particular as clearly established by the Federal Circuit in In re Beauregard, "computer programs embodied in a tangible medium, such as floppy diskettes, are patentable subject matter under 35 U.S.C. § 101"[2]. The holding in In re Beauregard has been expressly adopted by the

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[2] 53 F.3d 1583, 1583-84 (Fed. Cir. 1995)

United States Patent and Trademark Office, through the <u>Examination Guidelines for Computer-Related Inventions</u>[3] in which it is stated, "[A] claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program's functionality to be realized, and is thus statutory." Appellants claims 7 through 12 directly follow the guidelines established by the United States Patent and Trademark Office and also the holding in <u>In re Beauregard</u>.

Examiner additionally objects to the statutory nature of claims 7 through 12 by hypothesizing that a "computer program product" can be broadly interpreted to include a "carrier wave signal". Specifically, in the Final Office Action, Examiner stated,

> With regards to applicant's arguments, see remarks page 10, that a carrier wave signal falls into a statutory category, the examiner respectfully disagrees. A carrier wave is merely propagation through a medium and is therefore not a process, product, manufacture, or composition of matter. Therefore a carrier wave is not statutory.

Appellants already had argued in the Second Amendment that Examiner has read into claim 7 a limitation not found within claim 7--namely a carrier wave signal. Specifically, Appellants argued,

> Of note, the Examiner particularly objects to claims 12 through 15 because claims 12 through 15 recite a computer program product which the Examiner believes can be broadly interpreted to include "carrier-wave signal". Notwithstanding, Applicants can find no directive in the M.P.E.P. which renders an otherwise statutory claim into a non-statutory claim based upon the inclusion of a claim term that may relate to a propagation medium or a physical phenomenon of energy. In fact, M.P.E.P. 2106.01 is quite clear in setting forth an opposite proposition. Reproduced in part, M.P.E.P. 2106.01 states,
>
> *Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component.... **When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory** in most cases since use of technology permits the function of the descriptive material to be realized.*
>
> Therefore, Applicants respectfully solicit withdrawal of the imposed rejection of claims 7 through 12 under 35 U.S.C. § 101.

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[3] 61 Fed. Reg. 7478, 7482 (1996)

Even still, Examiner continues to ignore the reality of the law and the statutory guidelines for examining subject matter for patentability as set forth in the M.P.E.P. 2106.01 and instead provides Examiner's own "law". Alarmingly, despite Appellants' substantial reliance on well-established law and the rules set forth in the M.P.E.P., Examiner chooses to maintain Examiner's rejection <u>without a single recitation to any legal support for Examiner's spurious arguments</u>. Examiner's job is to act as fact finder in applying the law to Appellants' claims. Examiner's job is not to make up the law as Examiner sees fit.

THE REJECTION OF CLAIMS 1, 3, 4, 7, 9 AND 10 UNDER 35 U.S.C. § 103

For convenience of the Honorable Board in addressing the rejections, claims 2 through 6 stand or fall together with claim 1, claims 8 through 12 stand or fall together with claim 7, and claims 14 through 16 stand or fall together with claim 13.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness.[4] In so doing the Examiner must make the factual determinations set forth in <u>Graham v. John Deere Co.</u>[5] Thereafter, the Examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a prima facie case of unpatentability.[6] Furthermore, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness; however, the analysis need not seek out precise teachings directed to the specific subject matter

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[4] <u>See</u> <u>In re Fine</u>, 837 F.2d 1071, 1073 (Fed. Cir. 1988).
[5] 383 U.S. 1, 17 (1966).
[6] <u>In re Oetiker</u>, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.[7]

Of note, obviousness is a legal conclusion based on underlying factual determinations of four general types, all of which must be considered by the trier of fact: (1) the scope and content of the prior art; (2) the level of skill in the art; (3), the differences between the claimed subject matter and the prior art; and (4) any objective indicia of nonobviousness.[8] Appellants' position is that the Examiner has not properly established the underlying facts regarding (1) the scope and content of the prior art and (3) the differences between the claimed invention and the prior art.

Appellants' Claim 1 (and comparably, Claim 7) refers to a method of evaluating the quality of voice input recognition by a voice portal. Exemplary Claim 1 recites as follows:

> 1.   A method of evaluating the quality of voice input recognition by a voice portal, said method comprising the steps of:
>
> > **extracting a current grammar from the voice portal**;
>
> > generating a test input for the current grammar, the test input including a test pattern and a set of active grammars for the current grammar;
>
> > providing the test input to the voice portal;
>
> > analyzing the test pattern with respect to the set of active grammars with a speech recognition engine in the voice portal; and
>
> > deriving a measure of quality of recognition for the current grammar.

Integral to Claims 1 and 7 is the extraction of a current grammar from a **voice portal**.

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[7] KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1741 (2007)(quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

[8] See KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007); Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); Continental Can Co. USA, Inc. v. Monsanto Co., 948 F.2d 1264, 1270, 20 USPQ2d 1746, 1750-51 (Fed. Cir. 1991); Panduit Corp. v.Dennison Mfg. Co., 810 F.2d 1561, 1566-68, 1 USPQ2d 1593, 1594 (Fed. Cir. 1987).

In the Second Amendment, Appellant expressly argued the requirement of claims 1 and 7

of the presence of an interaction with a voice portal. Specifically, Appellants stated,

> Thus, as originally filed, claim 1 (and through similar language, claims 7 and 13) require the
> presence of an interaction with a voice portal. Yet, the notion of a voice portal is wholly absent
> within **all** cited references---especially Mahajan. Applicants noted as much in the Amendment of
> August 6, 2007. Yet, the Examiner dismissed Applicants' arguments as "moot in view of the new
> ground(s) of rejection." Notwithstanding, there is nothing "new" about Examiner's grounds of
> rejection. The Examiner has recited the IDENTICAL grounds of rejection in respect to Figure 3,
> Column 5, Line 11 of Mahajan in support of the flawed contention that Mahajan references a
> "voice portal".

Appellants further provided an explicit argument supported by extrinsic evidence as to the proper

claim construction of the claimed limitation "voice portal". Specifically, Appellants stated,

> As is well-known in the art and demonstrated by a simple Internet search, **the term voice portal**
> **generally refers to "a Web site or other service that a user can reach by telephone for**
> **information such as weather, sport scores, or stock quotes"** (from WhatIs.com), or "the voice
> equivalent of Web Portals, giving access to information through spoken commands and voice
> responses. Ideally a voice portal could be an access point for any type of information, services, or
> transactions found on the Internet" (from Wikipedia), or "the interface between a caller and an
> information source - it's the point of entry for a person using an IVR or speech recognition system.
> When augmented with VoiceXML, the voice portal can host a much wider variety of information,
> literally funneling any web-based data from your servers out to callers." (from Call Center
> Magazine, January 29, 2001).

Examiner responded to ALL of Appellants' arguments on page 3 of the Final Office Action with

a SINGLE SENTENCE reproduced herein in its entirety:

> With regards to applicants augments, see remarks page 13, that Mahajan does not teach a voice
> portal, it is noted that Mahajan was not relied upon to teach a voice portal. Therefore applicant's
> arguments in these regards are moot.

Thus, Examiner has dismissed Appellants' well-reasoned analysis complete with claim

construction and supporting evidence <u>with a degree of brevity and flippancy not appropriate for a</u>

<u>member of the examining corps</u>.

Examiner forgets (or perhaps lacks the requisite training) to understand the importance of

supported argument and clear reference to specific elements in cited art as the trier of fact in a

patent examination. As noted by the Supreme Court in <u>Festo Corp. v. Shoketsu Kinzoku Kogyo</u>

<u>Kabushiki Co.</u>,[9] a clear and complete prosecution file record is important in that "[p]rosecution history estoppel requires that the claims of a patent be interpreted in light of the proceedings in the PTO during the application process." The Courts that are in a position to review the rejections set forth by the Examiner (i.e., the Board of Patent Appeals and Interferences, the Federal Circuit, and the Supreme Court) can only review what has been written in the record; and therefore, the **Examiner must clearly set forth the rationale for the rejection and clearly and particularly point out those elements within the applied prior art being relied upon by the Examiner in the statement of the rejection.**

However, as will be apparent from page 3 of the Final Office Action, essentially, the Examiner is placing the burden on Appellants to establish that the combination of Mahajan and Yuschik does not disclose the claimed element of extracting a current grammar from the voice portal based upon Appellant's interpretation of the claims and Appellants' comparison of the claims with the applied prior art. However, this shifting of burden, from the Examiner to Appellants, is <u>premature</u> since <u>the Examiner has not discharged the initial burden of providing a</u> <u>*prima facie* case of obviousness.</u> Appellants also note that any continuing disagreement between Appellants and the Examiner as to whether or not a particular claimed feature is disclosed by the combination of Mahajan and Yuschik is a <u>direct result</u> of a lack of specificity by the Examiner in the statement of the rejection--e.g. where a teaching of extracting a current grammar from the voice portal can be found.

Based upon Appellants' arguments and the law cited herein, Appellants' position is that the Examiner has failed meet the initial burden of establishing a prima facie case of obviousness. As such, until that prima facie case has been made, Appellants have no burden to point out the

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[9] 535 U.S. 722, 122 S.Ct. 1831, 1838, 62 USPQ2d 1705, 1710 (2002).

differences between the applied prior art and the claimed invention though Appellants have done so in good faith for the convenience of the Examiner and the Honorable Board. Referring to the unpublished opinion of <u>Ex parte Pryor</u>[10], the Board of Patent Appeals and Interferences recognized the necessity for an Examiner to supply sufficient information to establish a prima facie case of obviousness. Specifically, the Board wrote:

> At the outset, we note the examiner has been of little help in particularly explaining the rejections on appeal. A mere statement that claims stand rejected "as being clearly anticipated by" a particular reference, without any further rationale, such as pointing out corresponding elements between the instant claims and the applied reference, fails to clearly make out a <u>prima facie</u> case of [obviousness] (emphasis in original).

Notwithstanding that the burden of pointing out the differences between the applied prior art and the claimed invention has not been shifted to Appellants, Appellants presented arguments as to the differences between Mahajan and Yuschik and the claimed invention in the Second Amendment.

THE REJECTION OF CLAIMS 2 AND 8 UNDER 35 U.S.C. § 103

In as much as claims 2 and 8 stand or fall together with claims 1 and 7 respectively, Examiner's error in connection with claims 1 and 7 flow to claims 2 and 8 and claims 2 and 8 are patentable at least for the reasons set forth in the discussion of Examiner's rejections of claims 1 and 7.

THE REJECTION OF CLAIMS 5, 6, 11, 12, 13, 15 AND 16 UNDER 35 U.S.C. § 103

Examiner rejects claim 13 based upon the combination of Mahajan, Yusckik and Randic. Specifically, Examiner states on page 15 of the Final Office Action:

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[10] Appeal No. 1997-2981.

Mahajan teaches a system for evaluating the quality of voice input recognition by a voice system having a speech recognition engine (figure 3), comprising:

an analysis interface for extracting a set of current grammars from the voice system a portion of training text is selected to be spoken 304, Figure 3, Column 5 line 11.);

a test pattern generator for generating a test input for each current grammar, the test input including a test pattern and a set of active grammars corresponding to each current grammar (At step 202, a portion of training data 304 is spoken by a person 308 to generate a test signal; Column 5 line 11.);

an apparatus for entering each test pattern into the voice system (At step 202, a portion of training data 304 is spoken by a person 308 to generate a test signal; Column 5 line 11.);

a results collector for analyzing each test pattern entered into the voice system with the speech recognition engine against the set of active grammars corresponding to the current grammar for said test pattern (At step 204, the predicted sequence of speech units is aligned with the actual sequence of speech units from training data 304; column 5. line 37.); and

a results analyzer for deriving a set of statistics of a quality of recognition of each current grammar (Under one embodiment, this objective function is an error function that indicates the degree to which the predicted sequence of speech units differs from the actual sequence of speech units after the alignment is complete; column 5, lines 44-47.).

However Mahajan does not specifically teach that the voice system is a voice portal or using a text to speech engine to enter data into the voice porthole. In the same field of speech systems, Yuschik teaches that the voice system is a voice portal (It is an object of the invention to design and select the vocabulary for a voice activated system (portal) column 3, line 7-20. The menus of the portal are shown in figure 4.).

Thus, Examiner asserts the identical grounds of rejection as set forth in respect to claims 1 and 7.

Accordingly, for the reasons set forth above in connection with claims 1 and 7, Examiner has not met Examiner's burden of proof in connection with establishing a prime facie case of obviousness due to the absence of a teaching directed to a "voice portal" in the combination of Mahajan and Yuschik.

THE REJECTION OF CLAIM 14 UNDER 35 U.S.C. § 103

In as much as claim 14 stands or falls together with claim 13, Examiner's error in connection with claims 1 and 7 and 13 flow to claim 14 and claim 14 is patentable at least for the reasons set forth in the discussion of Examiner's rejections of claims 1 and 7.

Based upon the foregoing, Appellant respectfully submit that the Examiner's rejections under 35 U.S.C. § 103(a) for obviousness based upon the applied prior art are not viable. Appellants, therefore, respectfully solicit the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. § 103(a).

Date: August 24, 2008

Respectfully submitted,

/Steven M. Greenberg/
Steven M. Greenberg
Registration No. 44,725
Customer Number 46322

VIII. CLAIMS APPENDIX

1.   (Original)   A method of evaluating the quality of voice input recognition by a voice portal, said method comprising the steps of:

extracting a current grammar from the voice portal;

generating a test input for the current grammar, the test input including a test pattern and a set of active grammars for the current grammar;

providing the test input to the voice portal;

analyzing the test pattern with respect to the set of active grammars with a speech recognition engine in the voice portal; and

deriving a measure of quality of recognition for the current grammar.

2.   (Original)   The method of claim 1, wherein said deriving step includes the step of deriving a confidence level and a set of n-best results for the test input, and further comprising the steps of:

comparing the confidence level and set of n-best results for the test input with an expected value to assess the measure of quality of recognition.

3.   (Original)   The method of claim 1, further comprising the steps of:

modifying the current grammar to create a modified grammar if the measure of quality of recognition for the current grammar deviates from a pre-determined range.

4.   (Original)   The method of claim 3, further comprising the steps of:

(i) generating a test input for the modified grammar, the test input including a test pattern and a set of active grammars for the modified grammar;

(ii) providing the test input for the modified grammar to the voice portal;

(iii) analyzing the test pattern for the modified grammar with respect to the set of active grammars corresponding to the modified grammar with the speech recognition engine in the voice portal;

(iv) deriving a measure of quality of recognition of the modified grammar; and

(v) re-modifying the modified grammar and repeating steps (i) through (iv) until the measure of quality of recognition of the modified grammar does not deviate from a pre-determined range.

5.   (Original)   The method of claim 1, further comprising the steps of:

modifying the test pattern to emulate one or more user voices prior to entering the test input into the voice portal.

6.   (Original)   The method of claim 1, further comprising the steps of:

modifying the test pattern to emulate the influence of one or more communications network qualities prior to entering the test input into the voice portal.

7.   (Previously Amended)   A computer program product for evaluating the quality of voice input recognition by a voice portal, said computer program product comprising computer

usable program code including a routine set of instructions which when executed by a machine cause the machine to perform the steps of:

extracting a current grammar from the voice portal;

generating a test input for the current grammar, the test input including a test pattern and a set of active grammars for the current grammar;

providing the test input to the voice portal;

analyzing the test pattern with respect to the set of active grammars with a speech recognition engine in the voice portal; and

deriving a measure of quality of recognition for the current grammar.

8. (Previously Amended)   The computer program product of claim 7, wherein said deriving step includes the step of deriving a confidence level and a set of n-best results for the test input, and further causing said machine to perform the steps of:

comparing the confidence level and set of n-best results for the test input with an expected value to assess the measure of quality of recognition.

9. (Previously Amended)   The computer program product of claim 7, further causing said machine to perform the steps of:

modifying the current grammar to create a modified grammar if the measure of quality of recognition for the current grammar deviates from a pre-determined range.

10. (Previously Amended)   The computer program product of claim 9, further causing said machine to perform the steps of:

(i) generating a test input for the modified grammar, the test input including a test pattern and a set of active grammars for the modified grammar;

(ii) providing the test input for the modified grammar to the voice portal;

(iii) analyzing the test pattern for the modified grammar with respect to the set of active grammars corresponding to the modified grammar with the speech recognition engine in the voice portal;

(iv) deriving a measure of quality of recognition of the modified grammar; and

(v) re-modifying the modified grammar and repeating steps (i) through (iv) until the measure of quality of recognition of the modified grammar does not deviate from a pre-determined range.

11.   (Previously Amended)   The computer program product of claim 7, further causing said machine to perform the steps of:

modifying the test pattern to emulate one or more user voices prior to entering the test input into the voice portal.

12.   (Previously Amended)   The computer program product of claim 7, causing said machine to perform the steps of:

modifying the test pattern to emulate the influence of one or more communications network qualities prior to entering the test input into the voice portal.

13.   (Original)   A system for evaluating the quality of voice input recognition by a voice portal having a speech recognition engine, comprising:

an analysis interface for extracting a set of current grammars from the voice portal;

a test pattern generator for generating a test input for each current grammar, the test input including a test pattern and a set of active grammars corresponding to each current grammar;

a text-to-speech engine for entering each test pattern into the voice portal;

a results collector for analyzing each test pattern entered into the voice portal with the speech recognition engine against the set of active grammars corresponding to the current grammar for said test pattern; and

a results analyzer for deriving a set of statistics of a quality of recognition of each current grammar.

14.   (Original)   The system of claim 13, wherein the set of statistics includes a confidence level and a set of n-best results for each test input, and wherein the results analyzer is configured to compare the confidence level and set of n-best results for each test input with an expected value to assess the quality of recognition of each current grammar having said test input with respect to its corresponding set of active grammars.

15.   (Original)   The system of claim 13, wherein the test pattern generator is configured to modify each test pattern to emulate one or more user voices prior to entering the test input into the voice portal.

16.   (Previously Amended)   The system of claim 13, wherein the test pattern generator is configured to modify each test pattern to emulate the influence of one or more communications network qualities prior to entering the test input into the voice portal.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellant in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

Since Appellant is unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.